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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,101

07/05/2006

Leszek Sikora

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05/21/2007

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EXAMINER

GERRITY, STEPHEN FRANCIS

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

05/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,101

Applicant(s)

SIKORA ET AL.

Examiner

Stephen F. Gerrity

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/21/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. Receipt is acknowledged of an Information Disclosure Statement, filed 21 September 2005, which has been placed of record in the file. An initialed, signed and dated copy of the PTO-1449 form is attached to this Office action.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 3, "the bottom plate" lacks proper antecedent basis.

Claim 1, line 5, the use of the pronoun "their" renders the claim indefinite; it is suggested that such be changed to --the faulty cigarettes--.

Claims 5 and 6, line 2 of each claim, "the activities" lacks proper antecedent basis; perhaps such should be changed to --the fault detecting and rejecting--.

Claim 12, line 2, "the pneumatic nozzle" renders the claim indefinite because two nozzles are defined in claim 11; perhaps such should be changed to --at least one of the two pneumatic nozzles--.

Claim 13, line 2, "detection moment" should be changed to --moment of detection--.

Claim 19, line 3, the use of the pronoun "their" renders the claim indefinite; perhaps "their operation" should be changed to --operation of the movable sensors--.

These and any other informalities should be corrected so that the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghini et al. (**GB 2,228,176**).

The Ghini et al. reference discloses a method of detecting and rejecting faulty cigarettes, where cigarettes are arranged in horizontal layers in channels (6) defined by walls (4 and 5) of an infeed chute (1) of a packing machine feeding system and move

gravitationally toward a bottom plate (9) from which they are transferred to the packing machine, and faulty cigarettes are detected with sensors (14) which can be located on both walls (4 and 5 - see p. 10, lines 6-14) defining their defects and rejected by a rejecting device (16), characterized in that while the cigarettes are stopped in the channels, which takes place between consecutive cycles of transferring cigarettes from the bottom plate to the packing machine, the cigarettes are inspected in all channels of the feeding system with use of fixed sensors (14), whereby the fixed sensors are coupled with the rejecting device (16) and detection and rejection of faulty cigarettes takes place. The Ghini et al. reference also discloses an embodiment in which a movable sensor (35) coupled with a rejecting device (16) is moved in a fixed trajectory (see figure 3) to detect faulty cigarettes and detection and rejection of faulty cigarettes takes place along the same trajectory. The difference between Ghini et al. and the claimed invention is that the embodiment including the movable sensor arrangement is not associated with the infeed channel, and the embodiment including the infeed channel has fixed sensors. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Ghini et al. method to have substituted the movable sensor arrangement the fixed sensors arrangement, in order to reduce the number of sensors, as the fixed sensors arrangement requires sensors for each channel of the infeed chute, whereas the substitution of movable sensors for the fixed sensors would require only two sensors (one for each side of the channel), which would reduce the complexity of the sensing and detecting structure.

Regarding claims 2 and 3, the Ghini et al. method as modified above may have either a constant or not constant distance between the trajectory and the bottom plate, as the sensors would be movable in two planes of motion.

Regarding claim 4, the Ghini et al. method as modified above would execute the rejection in the same place, as the movable sensor embodiment teaches that the rejecting device (16) is mounted in the same plane as the movable sensor.

Regarding claims 5 and 6, the Ghini et al. method discloses that the sensors are arranged in sets which may be used independently or dependently.

Regarding claim 7, the Ghini et al. method discloses that the sensors are located at the ends of both walls (4 and 5) in order to inspect the loose end and the filtered end of the cigarette.

Regarding claim 8, the Ghini et al. method teaches that the sensors constitute photo-optical elements (page 7).

Regarding claim 9, while the Ghini et al. method does not disclose that the sensors operate within blacklight, the examiner takes Official Notice that such is old and well known, and it would have been obvious to substitute sensors operating within blacklight for any one of the types of sensors disclosed in Ghini et al. as substituting one for another is routine to a skilled artisan.

Regarding claim 10, the Ghini et al. method discloses that the rejecting device constitutes a pneumatic nozzle (21).

Regarding claim 11, the Ghini et al. method does not disclose that the rejecting device comprises two pneumatic nozzles placed symmetrically on both sides of the

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movable sensor, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a second rejecting device on the other side of the sensor, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. Such a modification would make sense in order to increase the speed of detecting and rejecting of faulty cigarettes.

Regarding claim 12, as now modified the Ghini et al. method would have a faulty cigarette rejected by the pneumatic nozzle following the movable sensor, irrespectively of the direction of the sensor movement.

Regarding claim 13, the Ghini et al. method discloses a delaying circuit (31) which is used to delay with reference to the detection moment, which is a result of the time needed to replace the sensor with the rejecting device.

Regarding claims 14-16, the Ghini et al. method already teaches that the two-phase aligning of cigarette ends is realized in order to assure constant distance between the sensors and cigarettes, that the first aligning phase is realized with use of an independent aligning element, and that that the second aligning phase is realized with use of an aligning mechanism coupled with the sensors and the rejecting device.

Regarding claim 17, the Ghini et al. method teaches that between two consecutive cycles of transferring the bottom layer of cigarettes from the bottom plate (9) to the packing machine at least one detection and rejection cycle is executed, whereas each next detection and rejection cycle may be started after filling the gap after the rejected faulty cigarette with a cigarette delivered from the upper layer.

Regarding claim 18, the Ghini et al. method teaches that the cycles of detection and rejection of faulty cigarettes can be executed without breaks, excluding the time when cigarettes drop in channels by one layer.

Allowable Subject Matter

7. Claims 19 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

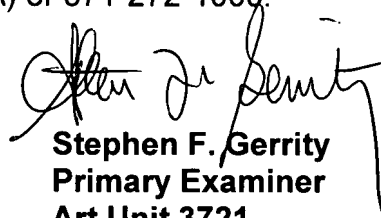
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed on the attached form (PTO-892) are cited to show methods of detecting faulty cigarettes. All are cited as being of interest and to show the state of the prior art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen F. Gerrity whose telephone number is 571-272-4460. The examiner can normally be reached on Monday - Friday from 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen F. Gerrity
Primary Examiner
Art Unit 3721

14 May 2007